

27. A beam steering apparatus, comprising:

a reflective means;

a constraint means coupled to said reflective means to constrain movement of the

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Contd reflective means in one or more degrees of freedom; and

an independently addressable electrode configured to position said reflective means.

28. The apparatus of claim 27, wherein the constraint means constrains movement of the reflective means in two degrees of freedom.

29. The apparatus of claim 27, wherein the constraint means includes one or more elastically deformable members.

30. The apparatus of claim 27, wherein the apparatus is a laser printer engine and further comprises:

a control means coupled to said addressable electrode.

31. The apparatus of claim 27, wherein the apparatus is an optical storage head and further comprises:

a control means coupled to said addressable electrode.

32. The apparatus of claim 27, wherein the apparatus is a bar rastering projector and further comprises:

a control means coupled to said addressable electrode.

33. The apparatus of claim 27, wherein the apparatus is a laser plotter and further comprises:

a control means coupled to said addressable electrode.

34. The apparatus of claim 27, wherein the apparatus is a laser marking writing tool and further comprises:

a control means coupled to said addressable electrode.

35. The apparatus of claim 27, wherein the apparatus is an optical switch and further comprises:

a control means coupled to said addressable electrode.

36. The apparatus of claim 27, further comprising:

an electronic control means coupled with said addressable electrode.

37. The apparatus of claim 36, wherein said reflective means is provided with a conductive film surface in communication with said electronic control means.

38. The apparatus of claim 27, wherein the constraint means is a gimbaled hinge means.

39. The apparatus of claim 27, wherein the constraint means is a compliant medium means.

40. The apparatus of claim 27, wherein said reflective means is moveably constrained in relation to said electrode.

41. The apparatus of claim 27, wherein said reflective means is deformable.

42. The apparatus of claim 27, wherein the beam steering means is at least partially micromachined.

43. Apparatus for viewing a medium, comprising:

a support member;

an optical fiber having one end fixedly mounted on said support member;

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concluf a focusing member mounted on said support member between said one end of the optical fiber and said medium for focusing a beam from said optical fiber onto said medium;

and

at least one micromachined active beam deflection mirror means on said support member between said optical fiber and said medium, for deflecting said beam to focus the beam at selected locations on said medium independent of movement of the support member relative to said medium.

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Respectfully submitted,



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